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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,447	03/23/2004	Alan Jack	003301-047	1805
21839	7590	01/28/2005	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			NGUYEN, HANH N	
POST OFFICE BOX 1404			ART UNIT	
ALEXANDRIA, VA 22313-1404			PAPER NUMBER	
			2834	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,447	<b>Applicant(s)</b> JACK, ALAN	
	<b>Examiner</b> Nguyen N Hanh	<b>Art Unit</b> 2834	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 6, 9-12, 14, 16, 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Workman.

Regarding claim 1, Workman disclose a stator core (13 in Fig. 6) for an electrical machine, said stator core comprising: an core back, and a plurality of teeth (14) arranged circumferentially at the core back and extending radially there from, wherein the core back is at least one sheet of electrically insulated soft magnetic material arranged as a spiral (abstract, Col. 3, lines 10-45 and Fig. 4).

Regarding claims 9 and 16, it is noted that all limitations of the claimed invention have been fulfilled by Workman as in claim 1

Regarding claims 2 and 10, Workman also disclose a stator core wherein the core back is annular.

Regarding claims 3 and 11, Workman also disclose a stator core wherein said sheet of electrically insulated soft magnetic material is elongated and has a length, a width, and a thickness, and wherein the length of said sheet of electrically insulated soft magnetic material extends essentially circumferentially, the width of said soft magnetic

material extends essentially axially, and the thickness of said soft magnetic material extends essentially radially (Fig. 4 and 5).

Regarding claim 4, Workman also disclose a stator core wherein said core back includes openings (to accommodate the bolts as shown in Fig. 2) for receiving the teeth.

Regarding claim 6, Workman also disclose a stator core wherein said sheet is fixed in the spiral shape by means of gluing (Col. 3, lines 10-15), welding or soldering.

Regarding claim 12, Workman also disclose a stator core wherein said core back includes openings (to accommodate the bolts as shown in Fig. 2) arranged to receive teeth, wherein said sheet is elongated and said openings are arranged not to cut the elongate edges of said sheet (Fig. 2).

Regarding claims 14 and 19, workman also shows the method for producing a stator core for an electrical machine further comprising the step of fixing the sheet in the shape of said spiral by means of gluing (Col. 3, lines 10-15), welding or soldering.

Regarding claims 20 and 21, it is noted that all limitations of the claimed invention have been fulfilled by workman as in claim 12.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 5, 8, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Workman.

Regarding claims 5 and 13, Workman show all limitations of the claimed invention except showing the stator core wherein the sheet is elongated and includes an opening at each end of said sheet. It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Workman by locating an opening at each end of said sheet for the purpose of receiving the stator teeth, since it has been held that rearranging parts of an invention involves only routine skill in the Art. In re Japikse, 86 USPQ 70.

Regarding claims 8 and 15, Workman show all limitations of the claimed invention except showing the stator core wherein the sheet is arranged to form three turn. It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Workman by forming the stator core with three turns of the sheet since the Examiner takes Official Notice of the equivalence of using three turns of thicker sheet or several more turns of thinner sheet to achieve certain thickness of the stator core would be within the level of ordinary skill in the Art.

3. Claims 7, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Workman in view of Jack et al.

Regarding claims 7 and 18, Workman show all limitations of the claimed invention except showing the stator core wherein the teeth are arranged to be fastened in the openings by means of force fitting, gluing, welding or soldering.

However, Jack et al. disclose a stator structure for an electric machine wherein the teeth are arranged to be fastened in the openings by means of force fitting (Figs. 5,

6 and Col. 2, lines 44-47) for the purpose of improving motor efficiency (Col. 1, lines 50-55).

Since Workman and Jack et al. are in the same field of endeavor, the purpose disclosed by Jack et al. would have been recognized in the pertinent art of Workman.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Workman by using force fitting means to fasten the teeth in the openings of the stator as taught by Jack et al. for the purpose of improving motor efficiency.

Regarding claim 17, Jack et al. also disclose the method wherein the step of attaching a plurality of teeth to the core back comprises arranging the teeth into openings in the core back (Figs. 1 and 6).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Art Unit: 2834

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

January 17, 2005



DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800